

a control command reception unit for receiving control command signals destined to the own device/service/sub-unit from a side of one network to which the own device/service/sub-unit is disclosed by the proxy configuration unit;

a control command transmission unit for transmitting signals corresponding to the control command signals received by the control command reception unit, to each device/service/sub-unit on another network different from said one network;

a contents protection information reception unit for receiving contents protection information destined to the own device/service/sub-unit from a device on the first network or the second network;

a contents protection information transfer unit for transferring the contents protection information received by the contents protection information reception unit to said each device/service/sub-unit on said another network, without making any change in the contents protection information;

a contents reception unit for receiving contents destined to the own device/service/sub-unit and protected by a contents key obtained from the contents protection information, from a device on the first network or the second network; and

a contents transfer unit for transferring the contents received by the contents reception unit to said each device/service/sub-unit on said another network, without making any change in the contents.

A2 6. (Amended) The relay device of claim 5, wherein the first contents protection unit and the second contents protection unit use different encryption schemes or identical encryption schemes based on different keys.

A3 17. (Amended) A relay device, comprising:

a first interface unit connected to a first network;

a second interface unit connected to a second network;

a first copy protection processing unit for carrying out a prescribed contents protection procedure including at least an authentication procedure and a key exchange procedure, with respect to one device/service/sub-unit on the first network;

a second copy protection processing unit for carrying out the prescribed contents protection procedure including at least an authentication procedure and a key exchange procedure, with respect to another device/service/sub-unit on the second network;

a contents reception unit for receiving encrypted data containing contents from the first interface unit;

a decryption unit for decrypting the encrypted data received by the contents reception unit, by using a contents protection key provided by the first copy protection processing unit, to obtain decrypted data;

a conversion unit for converting the decrypted data into converted data in another coding format;

an encryption unit for encrypting the converted data, by using a contents protection key provided by the second copy protection processing unit, to obtain re-encrypted data; and

a contents transmission unit for transferring the re-encrypted data to the second interface unit.

A4 19. (Amended) A relay device, comprising:

a first interface unit connected to a first network;

a second interface unit connected to a second network;

a first contents protection unit for carrying out a contents protection procedure with respect to one device/service/sub-unit on the first network;

a second contents protection unit for carrying out the contents protection procedure with respect to another device/service/sub-unit on the second network;

a contents reception unit for receiving contents destined to an own device/service/sub-unit on the relay device and encrypted according to one of the first and second contents protection units, from a device on one of the first network and the second networks; and

a contents transmission unit for transmitting the contents received by the contents reception unit to a device/service/sub-unit on another one of the first network and the second network, by encrypting the contents according to another one of the first and second contents protection units;

wherein said one of the first and second contents protection units carries out an authentication and/or a key exchange with a device/service/sub-unit on said one of the first network and the second network by referring to states of the contents reception unit and the contents transmission unit, when there is a request for a procedure of the authentication and/or the key exchange with respect to said another one of the first and second contents protection units.

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-19 are pending in the present application with Claims 2, 6, 17 and 19 having been amended by the present amendment.

In the outstanding Office Action, Claims 11, 17 and 19 were objected to; Claims 1, 2, 5 and 17-19 were rejected under 35 U.S.C. §112, second paragraph, Claims 1, 5-11, 14-16 and 19 were rejected under 35 U.S.C. §102(b) as anticipated by Adams, Jr. et al; Claims 2-4